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AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1 - 7. (Cancelled).

8. (New) A fuel cell system control unit comprising:

a first converter electrically connected to an electric power system through a circuit-breaker means;

an electric load connected to an electric line which ties the electric power system and the first converter;

a set of fuel cells connected to a DC circuit of said first converter through a second converter;

a secondary battery connected to said DC circuit through a third converter;

a current detecting means which detects AC currents from said converters and outputs their detected values;

a voltage detecting means which detects an AC voltage on the power system side of said circuit breaker means;

a receiving current detector for detecting the receiving current;

means for calculating a receiving electric power based on the detected receiving current and the AC voltage;

means for calculating the output power of the first power converter;

means for calculating the load power which the load consumes based on the receiving power and the output power of the first power converter; and

means for controlling the first-third power converters so that the output power of the first power converter approaches the load power.

9. (New) The fuel cell system control unit of claim 8, further comprising:

a voltage regulating means which feeds back a DC voltage value detected by said first converter and outputs a current command value so that the product of the fed-back DC voltage value by the current command value may be equal to the power command value;

an automatic current regulator which feeds back said detected AC current value and outputs an output voltage command value to make the current equal to said current command value;

a pulse width modulation (PWM) means which receives said output voltage command value and outputs pulses to drive the converter; and

a control unit which controls charging and discharging of the power system and power according to said voltage command value.

10. (New) The fuel cell control system according to claim 8, wherein said means for controlling said first-third converters further comprises:

a first current control means to make the current command value equal to the current of the fuel cell; and

a second current control means to make the current command value equal to the current of the secondary battery.

11. (New) The fuel cell control system according to claim 8, further comprising means for calculating a current command value output by the fuel cells

from said detected load power value to make power output by said second converter approximately equal to said load power.

12. (New) The fuel cell control system according to claim 8, wherein said control means comprises a means for calculating average values from said detected load power values.

13. (New) The fuel cell control system according to claim 8, wherein the means for controlling first-third converter comprises means for causing the secondary battery to output power when said receiving power due to the increase of said load power exceeds the preset receiving power value.